RESPONSIVENESS SUMMARY
CONCERNING EPA'S AUGUST 30, 2001
PUBLIC NOTICE PROPOSING TOXICITY TMDLS
FOR WATERS IN THE STATE OF GEORGIA

TOXICITY TMDLs -February 2002 - finalization of Toxicity TMDLs for Cabin Creek, Marburg Creek, Big Flat Creek, tributary to Tobesofkee Creek, and tributary to Little River

Public Participation Activity Conducted:

On August 30, 2001, EPA Region 4 published an abbreviated public notice in the legal advertising section of the Atlanta Journal Constitution. Additionally, Region 4 mailed copies of a detailed public notice to the Georgia Environmental Protection Division (EPD), the Plaintiffs in the Georgia total maximum daily load (TMDL) lawsuit against EPA (Sierra Club et al. v. John Hankinson et al., Civil Action 1:94-cv-2501-MHS), and persons, identified as potentially interested parties, on a mailing list maintained by Region 4. This public notice requested comments from the public on EPA's proposed TMDLs for a significant number of water quality limited segments in the State of Georgia.

Matters on Which Public Was Consulted:

As a result of settlement negotiations in the Georgia TMDL lawsuit against EPA (Sierra Club et al. v. John Hankinson et al., Civil Action 1:94-cv-2501-MHS), EPA had the following commitment:

> "If Georgia fails to propose for public comment by June 30, 2001, TMDLs for each waterbody identified in Georgia's 2000 Section 303(d) list, whether such Section 303(d) list is prepared by Georgia or by EPA, and that is located in the Oconee/Ocmulgee/ Altamaha Basins, then EPA shall propose such TMDLs by August 30, 2001. In the event EPA proposes such TMDLs, EPA will establish TMDLs following public notice and comment within a reasonable time, and, where significant comment is not received, expects to establish TMDLs by February 28, 2002, unless Georgia submits and EPA approves such TMDLs prior to EPA establishing such TMDLs."

The public was consulted on proposed TMDLs for the water quality limited segments in the Oconee, Ocmulgee, and Altamaha Basins of the State of Georgia. The proposed TMDLs are identified in the attached list. EPA Region 4 had received and evaluated water quality-related data and information about these waters and pollutants and had prepared documents supporting the preliminary determinations of these evaluations.

Summary of Public's Comments:

The following persons provided written comments or written request for copies of the proposed TMDL during the public comment period:

1. Charles D. Absher, P.E.
   Senior Engineer
   Integrated Science & Engineering, Inc.
   Griffin, Georgia
   October 30, 2001

2. Kesler T. Roberts, Staff Attorney
   Georgia Legal Watch
   264 North Jackson Street
   Athens, Georgia 30601
   October 30, 2001

COMMENT

The proposed toxicity TMDL for Cabin Creek does not identify the contaminant of concern nor does it identify how much should be reduced by what entity, (point or non-point source) within what period of time. Identification of a total maximum daily load so waterbodies can eventually meet their designated uses is the primary goal of a TMDL. This TMDL needs to be developed much further (using actual water quality and discharge monitoring data - at best, or reasonable assumptions based on best available information - at least) before implementation can begin.
Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

As documented on Georgia's most recent §303(d) list, "toxicity" is identified as a parameter of concern for Cabin Creek. Therefore, in accordance with §303 of the Clean Water Act, a TMDL for "toxicity" was developed to address the §303(d) listing. The TMDL includes a wasteload allocation, a load allocation, and a margin of safety to attain and maintain water quality standards with respect to toxicity.

In accordance with EPA guidance, a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) process is a mechanism that may be used to identify and reduce contaminants in municipal and industrial wastewater that cause toxicity. EPA's TIE/TRE guidance is described in the following documents:

1. Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
2. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations

(EPA/600/2-88-070)

3. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA 833-B-99-002)
4. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (EPA/600/6-91/003)
5. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080)
6. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081)
7. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F)

As stated in the Implementation section of the Cabin Creek toxicity TMDL report, the above guidance documents may be used to identify and reduce the contaminants causing toxicity in order to achieve the allocations established in the TMDL. This may serve as an effective means by which the TMDL can be implemented.

Considering the variability and the uncertainty regarding the specific existing level of toxicity associated with each potential source of toxicity, the TMDL did not include speculation regarding how much of a toxicity reduction would be needed. However, in accordance with §303(d) of the Clean Water Act, the TMDL establishes a clear allocation to each entity that potentially contributes to toxicity in Cabin Creek that ensures that water quality standards will be met.

COMMENT

The toxicity TMDL for Cabin Creek was based primarily on two dated whole effluent toxicity samples from Spring Industries and the City of Griffin's Cabin Creek Water Pollution Control Plant. The report states no information is available on the relative toxicity or pollutant contribution from the third wastewater discharge from the I-75 South Mobile Homes. Additional data is requested on: (1) current limits in each permit and when they are scheduled for reissuance; (2) recent pollutant loadings (types and amounts over the last five years); and (3) recent compliance histories (five years) of all facilities discharging into this stream segment. This information should be used to determine how much and what type of new permit limits will be required at these facilities in order for Cabin Creek to meet its designated use (fishing).

Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

EPA Region 4 delegated the National Pollutant Discharge Elimination System (NPDES) permit

program to the Environmental Protection Division of the Georgia Department of Natural Resources (GAEPD) on June 28, 1974. As a result, GAEPD issues and enforces NPDES permits for municipal and industrial facilities that discharge to waters within the State of Georgia. Regarding the NPDES permitting and enforcement information requested by the commenter, EPA suggests submitting this request in writing to GAEPD's Permitting, Compliance, & Enforcement program at the following address:

Environmental Protection Division, Georgia Dept. of Natural Resources
Permitting, Compliance, & Enforcement Program
4220 International Parkway, Suite 101
Atlanta, Georgia 30354

Whether or not the data requested is "critical" and "should be used to determine how much and what type of new permit limits will be required" is a matter to be decided by the NPDES permitting program of GAEPD. However, as stated in the TMDL report, GAEPD through its NPDES permitting process will determine whether the dischargers to Cabin Creek have a reasonable potential of discharging chronically toxic effluent (i.e., reasonable potential of exceeding their wasteload allocations). The results of this reasonable potential analysis will, in part, determine the specific type of requirements(s) for each of the facility's NPDES permits.

COMMENT

The toxicity TMDL for Cabin Creek states that non-point source pollutants are contributing to the toxicity of Cabin Creek, yet no data is provided to support this conclusion. Additional information is requested to support this assertion, including the nature and locations of potential direct and indirect sources and types of pollutants (e.g., agricultural, livestock, urban runoff, leaking sewer system collection lines, etc.) In addition, are there any other point sources of pollution into Cabin Creek (commercial, industrial)?

Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

The proposed TMDL report did not state that "non-point source pollutants are contributing to the toxicity of Cabin Creek." Instead, the TMDL report referenced GAEPD's §303(d) list which identifies urban runoff as a potential cause of impairment to Cabin Creek. However, during discussions EPA had with GAEPD following the August 30, 2001 proposal of this toxicity TMDL, GAEPD clarified that nonpoint sources in the Cabin Creek watershed are believed to only impact fecal coliform and biota impairment. In the judgement of GAEPD, there is no evidence that nonpoint sources cause or contribute to toxicity impairment. The TMDL report has been modified accordingly.

The only known point sources of pollution into Cabin Creek (commercial, industrial, etc.) are the three permitted point sources identified in the TMDL report.

COMMENT

It is noteworthy that the document recommends that GAEPD conduct a permit review of the three dischargers to Cabin Creek to determine if they have a reasonable potential of discharging chronically toxic effluent. Please clarify when this will occur and what organization at GAEPD is responsible for filling this important data gap.

Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

GAEPD's Permitting, Compliance, & Enforcement Program issues NPDES permits for the municipal and industrial facilities that discharge to waters of Georgia. According to GAEPD's July 2, 2001 "Basin Permitting Strategy," NPDES permits will be issued for facilities affected by a TMDL within 18 months of completion (or finalization) of the TMDL. Therefore, it is anticipated that NPDES permits for the three facilities included in the TMDL's wasteload allocation will be issued by July 30, 2003.

COMMENT

The implementation plan described in the Toxicity TMDL report for Cabin Creek is very weak and should include: what and when actions will be taken; what are appropriate best management practices for implementation in both the urban and agricultural setting; what regulatory mechanisms will be used; what long-term monitoring plan will be employed to judge the success of the TMDL; what pollutant-specific milestones to track improvement in water quality; clarification on the role and responsibilities of the various governmental entities, public and other stakeholders; and provisions for revising the TMDL is needed (which is likely in this case).

Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

The TMDL report has been modified to include more detailed information concerning implementation of the TMDL in the Cabin Creek watershed.

COMMENT

Does the Toxicity TMDL for Cabin Creek account for future growth? If not, this should be made clear in the document, as it will be important for future management of this watershed.

Charles D. Absher, P.E., Senior Engineer, Integrated Science & Engineering, Inc., Griffin, Georgia, October 30, 2001.

RESPONSE

Future growth in the watershed is allowed implicitly by the TMDL as long as it does not result in toxicity loading to the watershed that is inconsistent with the established wasteload allocation and load allocation.

COMMENT

In these TMDLs, as with all, an explicit margin of safety is vastly preferable.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, October 31, 2001.

RESPONSE

Consistent with published EPA guidance documents (e.g., Guidance for Water Quality-based Decisions: The TMDL Process), an implicit margin of safety may be used as part of a TMDL. For toxicity TMDLs, EPA Region 4 believes it is appropriate to use an implicit margin of safety.

COMMENT

If there is a problem with toxicity, there is no reason the point source dischargers should not have permit limits. EPA states that allocation to a point source does not automatically result in a permit limit or monitoring requirement. Neither TMDL documents nor NPDES permits are written in stone, and both will be revised within five years with the advent of new data and situations.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, October 31, 2001.

RESPONSE

In accordance with 40 CFR §122.44(d)(1)(vii)(B), effluent limitations in NPDES permits must be consistent with the assumptions and requirements of any available wasteload allocation. In addition, determination of appropriate NPDES permitting requirements generally involves consideration of several factors and pieces of information that fall outside the authority of §303(d) of the Clean Water Act. These other factors and pieces of information considered in the NPDES permitting process include, but are not limited to: 1) appropriate compliance schedules; 2) federal or state guidance concerning NPDES permitting requirements; 3) federal and state reasonable potential regulations and rules; 4) other federal and state regulations and rules pertaining to NPDES permitting; 5) reasonable potential procedures adopted by the states; 6) current levels of pollutant in the effluent; 7) appropriate frequency and type of monitoring; and 8) other data that may be applicable to establishing NPDES permitting requirements.

It would be inappropriate for EPA or the State to prescribe NPDES permitting requirements based solely on a wasteload allocation without considering all of the other important elements listed above. Therefore, NPDES permitting requirements are determined by the NPDES permit writer, not the author of a TMDL. The commenter will have an opportunity to provide input concerning any NPDES permitting requirements during the public comment period for the applicable NPDES permit during the time that it is proposed.

COMMENT

Protection against chronic levels of toxicity may take care of acute toxicity as EPA claims, but the explanation of this is unclear both verbally and mathematically.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, October 30, 2001.

RESPONSE

Maintaining protection against chronic toxicity will inherently maintain protection against acute toxicity. The wasteload allocation and load allocation for the toxicity TMDL requires that there shall be no observable toxic effects from the point source and no observable toxic effects from any nonpoint sources. If there are no observable toxic effects, it is inherent that there will be no acute or lethal toxic effects. Therefore, the toxicity TMDL proposed for the tributary

to the Little River protects against chronic toxicity and acute toxicity.

The mathematical convention used by EPA for toxicity (i.e., toxicity units) is defined in EPA's 1991 Technical Support Document for Water Quality-based Toxics Control. As evident in this 1991 document, there is no mathematical correlation between chronic toxicity units and acute toxicity units. Therefore the TMDL report provides a verbal explanation, but not a mathematical explanation, to demonstrate how this TMDL will inherently protect against chronic and acute toxicity.

COMMENT

Although problems with toxicity have existed for many years in some waters, there has been no real push to get to the source of the pollution. Enforcement is lax and information about what the toxic agents really are is missing.

Kesler T. Roberts, Staff Attorney, Georgia Legal Watch, 264 North Jackson Street, Athens, Georgia 30601, October 30, 2001.

RESPONSE

The TMDL report has been amended to include more detailed information concerning implementation of the wasteload allocation and the load allocation. As described in the Implementation section of the TMDL report, a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) process is a mechanism that may be used to identify and reduce contaminants that cause toxicity. EPA's TIE/TRE guidance is described in the following documents:

1. Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
2. Generalized Methodology for Conducting Industrial Toxicity Reduction

Evaluations (EPA/600/2-88-070)

3. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA 833-B-99-002)
4. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (EPA/600/6-91/003)
5. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080)
6. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081)
7. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F)

These guidance documents may be used to identify and reduce contaminants causing toxicity in order to achieve the allocations established in the TMDLs.

(c) In April 2000, the State adopted rules and regulations for water quality control that provide a site-specific temporary exception for Springs Industries concerning the requirement for compliance with the water quality-based chronic whole effluent toxicity criteria in Cabin Creek. Consistent with Georgia law, this change to the State's rules and regulations went through a rule-making process which included an opportunity for the public to review and provide comments. After a review of all of the information and data relevant to the State's temporary exception, EPA determined that the State's rules and regulations compiled with Section 303 of the Clean Water Act and 40 CFR Part 131 and therefore approved of the revised rules and regulations on January 10, 2002.

Description of the Effectiveness of the Public Participation Program:

The public participation process in the matter of EPA's establishment of total maximum daily loads for pollutants and waters in the State of Georgia was considered to be an important one. The comments received from the City of Griffin and Georgia Legal Watch were fully considered in finalizing the toxicity TMDLs.. EPA Region 4 considers the public participation process to have been effective.